

## **AMENDMENT TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (currently amended) A security system (100) having a camera (3) for taking pictures of objects, the security system (100) including at least one subsystem (101, 102), ~~characterized in that~~ wherein the first subsystem (101) includes a first function module (1) with a light source and configured to control the brightness of the light source ~~whose brightness is controllable~~, a second function module (6) ~~for generating~~ configured to generate a digital image sequence from pictures taken by the camera (3), and a third function module (8) ~~for deriving~~ configured to derive the a noise variance as a function of the a gray value from the digital image sequence.
2. (currently amended) The security system as defined by claim 1, ~~characterized in that~~ wherein the security system (100) includes a memory (9), in which the function values of the noise variance can be stored in memory as a function of the gray value.
3. (currently amended) The security system as defined by claim 1, ~~characterized in that~~ wherein the second subsystem (102) includes a function module (13) ~~for comparing~~ configured to compare a gray value variance, derived from pictures taken by the camera, with a predeterminable threshold value.
4. (currently amended) A method for operating a security system (100), including a camera for taking pictures of objects, and at least one subsystem (101, 102), wherein the subsystem (101) includes a first function module (1) with a light source, a second function module (6), and a third function module (8) comprising the method steps of: ~~characterized in that~~

taking pictures of objects using camera (3),  
controlling the brightness of the light source in the first function module (1),  
generating a digital image sequence from pictures taken by camera 3 using the  
second function module (6), and  
deriving a noise variance as a function of a gray value from the digital image  
sequence using the third function module (8) and wherein  
the method includes a first operating state (initializing phase) and a second  
operating state (operating phase).

5. (currently amended) The method as defined by claim 4 ~~4~~, ~~characterized in that~~  
wherein, in the first operating state of the security system (100), the noise variance is  
ascertained as a function of the gray value of an image sensor (4) located in the camera  
(3) and is stored in a memory (9).

6. (currently amended) The method as defined by claim 4 ~~5~~, ~~characterized in that~~  
wherein, for ascertaining the noise variance as a function of the gray value, the camera  
(3) including the image sensor (4) is subjected to the radiation of a light source.

7. (currently amended) ~~The method as defined by claim 1,~~ A security system (100)  
having a camera (3) for taking pictures of objects, the security system (100) including at  
least one subsystem (101, 102), wherein the first subsystem (101) includes a first  
function module (1) with a light and configured to control the brightness of the light  
source; a second function module (6) configured to generate a digital image sequence  
from pictures taken by the camera (3); and a third function module (8) configured to  
derive a noise variance as a function of a gray value from the digital image sequence  
and wherein,  
~~characterized in that~~ the light source is controlled such that the brightness of the light  
source is increased in small increments as a function of time and then after each  
increase is kept constant for a predeterminable length of time, so that a kind of stairstep

curve for the functional dependency of the brightness of the light source on the time is created.

8. (currently amended) The method as defined by claim 4 5, ~~characterized in that~~ wherein the light source, varied in steps in its brightness, is recorded by the camera (3); that the image sensor (4) of the camera (3) converts the pictures taken into a digital image sequence; and that from this image sequence, a functional relationship representing the noise variance as a function of the gray value is derived and is stored in the memory (9).

9. (currently amended) The method as defined by claim 4 4, ~~characterized in that~~ wherein, in the second operating state of the security system (100), images of a region to be secured are taken by the camera (3), and these images are examined for the presence of moving objects in the region to be secured.

10. (currently amended) The method as defined by claim 4 9, ~~characterized in that~~ wherein, from chronologically successive pictures of the region to be secured, the gray value variance for at least selected pixels is ascertained; that if a deviation is found, a comparison with a threshold value is made, and this threshold value is predetermined variably as a function of the gray value.

11. (currently amended) The method as defined by claim 10, ~~characterized in that~~ wherein the variable threshold value is read out from values stored in the memory (9).

12. (currently amended) The ~~method~~ security system as defined by claim 1, ~~characterized in that~~ wherein a the dependency of the noise variance on the gray value is ascertained for different parameters of the camera (3) and is stored as a function value in the a memory device (9).

13. (new) A method for operating a security system (100), comprising a camera (3) and at least one subsystem (101, 102), wherein the subsystem (101) includes a first function module (1) with a light source, a second function module (6), and a third function module (8) comprising the method steps of:

- taking pictures of objects using camera (3),

- controlling the brightness of the light source in the first function module (1) such that the brightness of the light source is increased in small increments as a function of time and then after each increase is kept constant for a predeterminable length of time, so that a kind of staircase curve for the functional dependency of the brightness of the light source on the time is created,

- generating a digital image sequence from pictures taken by camera 3 using the second function module (6), and

- deriving a noise variance as a function of a gray value from the digital image sequence using the third function module (8).

14. (new) A method for operating a security system (100), comprising a camera (3), a memory device (9), and at least one subsystem (101, 102), wherein the subsystem (101) includes a first function module (1) with a light source, a second function module (6), and a third function module (8) comprising the method steps of:

- taking pictures of objects using camera (3),

- controlling the brightness of the light source in the first function module (1),

- generating a digital image sequence from pictures taken by camera 3 using the second function module (6),

- deriving a noise variance as a function of a gray value from the digital image sequence using the third function module (8),

- ascertaining, for different parameters of the camera (3), a dependency of the noise variance on the gray value, and

- storing the dependency ascertained as a functional value in memory device (9).

15. (new) A security system (100) comprising:

a camera (3) for taking pictures including an image sensor (4);

at least one subsystem (101, 102), comprising: a first function module (1) with a light source; a second function module (6) configured to generate a digital image sequence from pictures taken by the camera (3); and a third function module (8) configured to derive a noise variance as a function of a gray value from the digital image sequence wherein:

the first function module (1) is configured to control the brightness of the light source and

deriving the noise variance as a function of the gray value by third function module (8) involves subjecting the camera (3) including the image sensor (4) to the radiation of the light source.

16. (new) A method for operating a security system (100), comprising a camera (3) including an image sensor (4) and at least one subsystem (101, 102), wherein the subsystem (101) includes a first function module (1) with a light source, a second function module (6), and a third function module (8) comprising the method steps of:

taking pictures of objects using camera (3),

controlling the brightness of the light source in the first function module (1),

generating a digital image sequence from pictures taken by camera 3 using the second function module (6), and

deriving a noise variance as a function of a gray value from the digital image sequence using the third function module (8), wherein

deriving the noise variance as a function of the gray value using the third function module (8) involves subjecting the camera (3) including the image sensor (4) to the radiation of the light source.